



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/781,583	02/12/2001	Charley Y. Lloyd	5520USA(DBC G180.140.101	9716

7590

04/24/2003

Douglas J. Taylor, Esq.  
P.O. Box 1113  
Minneapolis, MN 55440

EXAMINER

MADSEN, ROBERT A

ART UNIT

PAPER NUMBER

1761

DATE MAILED: 04/24/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/781,583

Applicant(s)

LLOYD ET AL.

Examiner

Robert Madsen

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4-7,10-15,19-24,32-40,43-50,53 and 54 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

- 6) ☒ Claim(s) 1,4-7,10-15,19-24,32-40,43-50,53 and 54 is/are rejected.

- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 06, 2003 has been entered. Claims 2,3,8,9,16-18,41,42,51,52 have been cancelled. Claims 53 and 54 have been added. Claims 1,4-7,10-15,19-24,32-40,43-50, 53 and 54 remain pending in the application.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not provide any support for "a density less than 375g/100 cuin" since this includes densities outside of the range disclosed (i.e. greater than 225 g/100 cuin). For examination purposes,

Art Unit: 1761

examiner understands this to mean a density less than 375g/100 cuin but greater than 225 g/100 cuin.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1,4-7,10-15,19-24,46-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickerson (US 5706980) in view of Newarski (US 5727679) , Foehse et al. (US 5151283), and Perry et al. (1997)

6. Regarding claims 1,4-7,10-15,19-23,46-48 Dickerson teaches a two compartment container with two pour openings for restricted flow adapted for on-the go consumption with a liquid and dry consumable product, such as milk and cereal, which would be R-T-E's as recited in claims 5,13,20 since Dickerson teaches they are conventionally consumed with milk (Abstract, Column 1, line 5 to Column 3, line 7, and Figures). Additionally, Dickerson teaches one of the problems in attempting to consume both milk and cereal is the varying flow characteristic and size of cereals (Column 3, lines 10-16). Although Dickerson teaches a uniform spherical shape, as recited in claims 1 and 10 (i.e. a circle is a two dimensional representation of a sphere), Dickerson is silent in teaching a uniform size or density of R-T-E as recited in claims 1,4,6,7,10-

Art Unit: 1761

15,19, 20 , 22,46, and 48, a sphere that does not deviate from a true sphere by more than 10%, as recited in 47, or puffed R-T-E as recited in claims 6,13,20,23.

7. Newarski is relied on as evidence of the conventionality of packaging milk and puffed R-T-E's in connected containers (Abstract, Column 1, lines 50-66,Column 4, lines 43-50).

8. Foehse et al. teach a puffed R-T-E having a bulk density 0.05-0.15 g/cc (i.e. includes 225-246 g per 100cuin) and depending on the level of sugar coating would increase the density even further (Column 9, line 20 to Column 10 line 16, See Example 4), as well as a specific density of 0.2-0.35 g/cc, which includes 328-375 g per 100 cuin (Abstract). Foehse et al. teach forming pellets having diameters of 2-20 mm , or 0.078 - 0.787 in, that are puffed to twice the volume, which would be the equivalent to increasing the diameters to 0.098 to 0.991 in (i.e. doubling the volume would result in a diameter of 1.26 times greater ) to form sphere shaped puff pieces (Column 8, lines 20-34, Column 9, lines 13-29). Therefore, it would have been obvious to select a cereal that is a spherical puffed shape with uniform density between 225 and 375 g per 100 cuin, and diameter of within the range of 0.2 and 0.25 in, and since these are known puffed R-T-E properties and one would have been merely substituting one type of R-T-E for another.

9. With respect to selecting a "uniform" diameter within a particular range and a sphere that deviates no more than 10% from a true sphere, Perry et al. teach a solution to Dickerson's problem of varying flow characteristics. Perry et al. teach bulk material having uniform properties, including particle size and a smooth surface, provide

Art Unit: 1761

optimum gravity-induced flow properties (Pages 21-30 and 21-31). Therefore, it would have been further obvious to select cereal with a uniform diameter, in addition to shape and density, since this would eliminate the varying flow characteristics. It would have been further obvious to modify Dickerson such that the cereal shape did not deviating more than 10% of a true sphere, since the closer to a true sphere, the smoother the surface, and a smooth surface helps to eliminate varying flow characteristics.

10. Regarding claim 24, Dickerson teaches the second pour opening is at least 2.5 times greater than the largest dry product (See Figure 1, Figure 8).

11. Claims 21, 22, 24, 46-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickerson (US 5706980) in view of Kraig et al. (US 4515822) and Perry et al. (1997).

12. Regarding claims 21, 22, 46-48, Dickerson teaches a two compartment container with two pour openings for restricted flow adapted for on-the go consumption with a liquid and dry consumable product. Dickerson teaches a cereal or small fruit pieces for a dry product and milk for a liquid product (Abstract, Column 2, line 50-Column 3, line 7, Figures). Additionally, Dickerson teaches one of the problems in attempting to consume both milk and cereal, for example, is the varying flow characteristic and size of cereals (Column 3, lines 10-16). Dickerson teaches a uniform shape, by representing the cereal as circles, and a circle is a conventional a two dimensional representation of a sphere (See Figures 7 and 8), but is silent in teaching a

uniform size ,density, or that the sphere does not deviate from a true sphere by more than 10% as recited in claims 21,46-48.

13. Kraig et al. teaches a dry consumable product (i.e. RTE cereal and a fruit product) that comprises a plurality of spherical fruit pieces having a diameter less than 0.4 (i.e. 0.31 to 0.47 ) and density of 0.15 to 0.25 g/cc , which is greater than 225 and less than 375 g/100 cuin, as recited in claim 22. Therefore, it would have been obvious to include the fruit of Kraig et al., since one would have been substituting one spherical fruit piece for another.

14. With respect to selecting "uniform" properties, Perry et al. teach a solution to the problem recognized by Dickerson, varying flow characteristics. Perry et al. teach bulk material having uniform properties provide optimum gravity-induced flow properties (Pages 21-30 and 21-31). Therefore, it would have been obvious to select a dry product with a uniform size, spherical shape ,and density since this would eliminate the varying flow characteristic problem taught by Dickerson.

15. Regarding claim 24, Dickerson teaches the second pour opening is at least 2.5 times greater than the largest dry product (See Figure 1,Figure 8).

16. Claims 32-38,49,50,53,54, are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickerson (US 5706980) in view of Newarski (US 5727679) , Foehse et al. (US 5151283), and Perry et al. (1997).

17. Regarding claims 32-38,49,50, Dickerson teaches a method of manufacturing a packaged consumable product comprising providing a two compartment container with

Art Unit: 1761

pour openings for restricted flow adapted to facilitate on-the go consumption , dispensing milk in the first compartment and a cereal into the second compartment, as recited in claims 32 and 38(Abtract, Column 2, line 50-Column 3, line 7, Figures). The cereal compartment may be reusable (i.e. dispensing the milk and cereal by the consumer) or pre-packaged, which includes dispensing by a manufacture (Column 7, lines 10-40). Dickerson also teaches the cereal opening is sized 10-30% of the lid opening (may be larger or smaller) and sized to fit the mouth of the user, which would be the cross-section of pour opening as recited in claim 50(Column 4, lines 50-64), but Dickerson teaches one of the problems in attempting to consume both milk and cereal is the varying flow characteristic and size of cereals through the opening(Column 3, lines 10-16). Although Dickerson teaches a uniform spherical shape, as recited in claims 36 and 37 (i.e. a circle is a two dimensional representation of a sphere), Dickerson is silent in teaching the cereal has a particular density as recited in claims 35, a particular diameter as recited in claims 32-34, selecting a particular dimension based on a desired flow as recited in claim 49, and that the cereal is a *new product* having the same composition as a known product.

18. Newarski is relied on as evidence of the conventionality of packaging milk and puffed R-T-E's in connected containers (Abstract, Column 1, lines 50-66,Column 4, lines 43-50).

19. Foehse et al. teach a puffed R-T-E having a bulk density 0.05-0.15 g/cc (i.e. includes 225-246 g per 100cuin) and depending on the level of sugar coating would increase the density even further (Column 9, line 20 to Column 10 line 16, See Example



4), as well as a specific density of 0.2-0.35 g/cc, which includes 328-375 g per 100 cuin (Abstract). Foehse et al. teach forming pellets having diameters of 2-20 mm , or 0.078 - 0.787 in, that are puffed to twice the volume, which would be the equivalent to increasing the diameters to 0.098 to 0.991 in (i.e. doubling the volume would result in a diameter of 1.26 times greater ) to form sphere shaped puff pieces (Column 8, lines 20-34, Column 9, lines 13-29). Therefore, it would have been obvious to select a cereal that is a spherical puffed shape with uniform density between 225 and 375 g per 100 cuin, and diameter of within the range of 0.2 and 0.25 in, and since these are known puffed R-T-E properties and one would have been merely substituting one type of R-T-E for another.

20. With respect to selecting a "uniform" diameter within a particular range and the cereal being a "new product", Perry et al. teach a solution to Dickerson's problem of varying flow characteristics. Perry et al. teach bulk material having uniform properties, including particle size, provide optimum gravity-induced flow properties, or selecting a maximum outer dimension based flow (Pages 21-30 and 21-31). Furthermore, removing unwanted particle sizes (i.e. Foehse et al. teach a large range) from a bulk material to obtain a more uniform particle size (e.g. by sieving), would result in a "new product". Therefore, it would have been obvious to include a new "cereal" with a uniform size range, shape, and density range based a desired flow through the cross-sectional area taught by Dickerson, since this would eliminate the cereal varying flow problem through the opening.

21. Regarding claims 53 and 54, Dickerson is silent in teaching the known product has a density (i.e. less than 225 g per 100 cuin) less than the new product (i.e. more than 225 g per 100cuin). As discussed above in paragraphs 19 and 20, the new product comprises spheres with a more uniform size. It is notoriously known that sphere shaped particles with uniform diameters or sizes have a much greater bulk density than sphere shaped particles of varying sizes. Therefore, in light of the discussion in paragraphs 19 and 20, it would have been further obvious that the known product has a density (i.e. less than 225 g per 100 cuin) less than the new product (i.e. more than 225 g per 100cuin) since spheres with a more uniform size would have a greater bulk density.

22. Claims 39,40,43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickerson (US 5706980) in view of Newarski (US 5727679), Foehse et al. (US 5151283), and Perry et al. (1997).

23. Dickerson teaches a method of manufacturing a packaged consumable product comprising providing a two compartment container with pour openings for restricted flow adapted to facilitate on-the go consumption, dispensing milk in the first compartment and a cereal into the second compartment, as recited in claims 39 and 45(Abstract, Column 2, line 50-Column 3, line 7, Figures). The cereal compartment may be reusable (i.e. dispensing the milk and cereal by the consumer) or pre-packaged, which includes dispensing by a manufacture (Column 7, lines 10-40). Additionally, Dickerson teaches one of the problems in attempting to consume both milk and cereal is the varying flow

Art Unit: 1761

characteristic and size of cereals (Column 3, lines 10-16). Although Dickerson teaches a uniform spherical shape, as recited in claims 43 and 44 (i.e. a circle is a two dimensional representation of a sphere), Dickerson is silent in teaching the cereal has a particular density (such as not less than 225 g/100cuin as recited in claim 39 or 225-375 g/100cuin as recited in claim 40), diameter such as 0.2-0.25 inch as recited in claim 39.

24. Newarski is relied on as evidence of the conventionality of packaging milk and puffed R-T-E's in connected containers (Abstract, Column 1, lines 50-66, Column 4, lines 43-50).

25. Foehse et al. teach a puffed R-T-E having a bulk density 0.05-0.15 g/cc (i.e. includes 225-246 g per 100cuin) and depending on the level of sugar coating would increase the density even further (Column 9, line 20 to Column 10 line 16, See Example 4), as well as a specific density of 0.2-0.35 g/cc, which includes 328-375 g per 100 cuin (Abstract). Foehse et al. teach forming pellets having diameters of 2-20 mm , or 0.078 - 0.787 in, that are puffed to twice the volume, which would be the equivalent to increasing the diameters to 0.098 to 0.991 in (i.e. doubling the volume would result in a diameter of 1.26 times greater ) to form sphere shaped puff pieces (Column 8, lines 20-34, Column 9, lines 13-29). Therefore, it would have been obvious to select a cereal that is a spherical puffed shape with uniform density between 225 and 375 g per 100 cuin, and diameter of within the range of 0.2 and 0.25 in, and since these are known puffed R-T-E properties and one would have been merely substituting one type of R-T-E for another.

Art Unit: 1761

26. With respect to selecting a "uniform" diameter within a particular range, Perry et al. teach a solution to Dickerson's problem of varying flow characteristics. Perry et al. teach bulk material having uniform properties, including particle size, provide optimum gravity-induced flow properties (Pages 21-30 and 21-31). Therefore, it would have been further obvious to select cereal with a uniform diameter, in addition to shape and density, since this would eliminate the varying flow characteristics.

27. Claims 32-38 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ness et al. (US2002/0192338B1) in view of Foehse et al. (US 5151283).

28. Regarding claims 32-38, and 53, Ness et al. teach a method of manufacturing a packaged consumable product comprising providing a two compartment container with pour openings for restricted flow adapted to facilitate on-the go consumption, dispensing milk in the first compartment and an R-T-E into the second compartment, as recited in claims 32 and 38. Ness et al. further teach selecting a new product with a smaller diameter than a known product so that the new product bulk density is greater, as recited in claims 32 and 54 (Abstract, Paragraphs 0008-0016, Figures) However, Ness et al. are silent in teaching an particular diameter as recited in claim 32-34, that the pieces are substantially uniform or spherical as recited in claims 36 and 37, or a particular density as recited in claim 35.

29. Foehse et al. teach an R-T-E having a bulk density 0.05-0.15 g/cc (i.e. includes 225-246 g per 100cuin) and depending on the level of sugar coating would increase the density even further (Column 9, line 20 to Column 10 line 16, See Example 4), as well

Art Unit: 1761

as a specific density of 0.2-0.35 g/cc, which includes 328-375 g per 100 cuin (Abstract). Foehse et al. teach forming pellets having diameters of 2-20 mm , or 0.078 - 0.787 in, that are puffed to twice the volume, which would be the equivalent to increasing the diameters to 0.098 to 0.991 in (i.e. doubling the volume would result in a diameter of 1.26 times greater ) to form sphere shaped puff pieces (Column 8, lines 20-34, Column 9, lines 13-29). Therefore, with respect to claims 32-37, it would have been obvious to select a cereal that is a spherical puffed shape with uniform specific density between 225 and 375 g per 100 cuin (i.e. thus the product is substantially uniform with respect to density), and diameter of within the range of 0.2 and 0.25 in, and since these are known R-T-E properties and one would have been merely substituting one type of R-T-E for another.

30. Regarding claim 54, Ness et al. teach reducing the size to increase bulk density and Foehse et al. teach a bulk density of 0.05 to 0.15g/cc. Therefore, it would have been obvious to modify Ness et al. such that the new product bulk density to be greater than 225 g per 100 cuin and the known product would have been less than 225 g per 100 cuin since Foehse et al. teach the conventional range for the known product includes densities lower than 225 g per 100 cuin.

### ***Response to Arguments***

31. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.


**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Madsen whose telephone number is (703)305-0068. The examiner can normally be reached on 7:00AM-3:30PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (703)308-3959. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9310 for regular communications and (703)872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0061.

Robert Madsen  
Examiner  
Art Unit 1761  
April 11, 2003

  
**STEVE WEINSTEIN**  
**PRIMARY EXAMINER** 1761  
for M. Cano